

REMARKS

Claims 1-7, 9-15, 18-34, 55 and 62-74 were previously pending in this application. Claims 1, 2, 13, 18, 19, 27-29, 62, 63 and 70 are amended. No new claims have been added. As a result claims 1-7, 9-15, 18-34, 55 and 62-74 are pending for examination with claims 1, 13, 18 and 62 being independent claims. No new matter has been added.

Rejections Under 35 U.S.C. §102

The Office Action rejects claims 1-3, 5, 7, 9-14, 18-20, 22, 24, 26-27, 30, 32-34, 55, 62-64, 66, and 67-73 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,695,269 to Anscher (hereinafter "Anscher").

As an initial matter, Applicant notes that Anscher is a continuation-in-part of Application No. 09/216,680 (hereinafter the '680 application). A copy of the '680 application obtained from the U.S. Patent Office is attached here as Attachment A for the Examiner's reference. To carry back the 35 U.S.C. §102(e) date of Anscher to the filing date of the '680 application, the '680 application must support the invention claimed in the instant application as required by 35 U.S.C. §112, first paragraph. (MPEP 2136.03(IV).) Applicant respectfully asserts that the '680 application does not support the invention claimed in claims 1, 13, 18 and 62 as required by 35 U.S.C. §112, first paragraph and therefore has a filing date of the CIP (Anscher) for the purpose of independent claims 1, 13, 18 and 62.

Anscher was filed on September 19, 2000. Applicant's priority application, Application No. 60/206,172, was filed on May 22, 2000. A copy of Applicant's priority application is attached here as Attachment B for the Examiner's reference. Applicant's priority application fully supports each of independent claims 1, 13, 18 and 62. Because Applicant's priority application adequately supports and enables the subject matter of each of claims 1, 13, 18 and 62, each of these claims is entitled to the benefit of the filing date of Applicant's priority application. (MPEP 201.11(I)(A).)

In contrast, the '680 application does not include Figures 14, 15a, and 15b and also fails to describe the embodiments illustrated in those figures. Accordingly, the subject matter of Figures 14, 15a and 15b is not entitled to the priority date of the '680 application. Thus, the embodiments illustrated in Figures 14, 15a and 15b of Anscher are not prior art to the instant

application because the portion of Anscher that discloses Figures 14, 15a and 15b was filed four months after the filing date of the Applicant's priority application. The following remarks address the patentability of the claims as amended herein in view of the remainder of Anscher, i.e., in view of Figures 1-13 and the associated description.

As amended, claim 1 recites "a fastener assembly comprising: a fastening element; and a fastener comprising: a base; a housing connected to the base, the housing adapted to retain the fastening element when the fastening element is inserted in the housing; and a depressible latch connected to the base external to the housing and positioned relative to the housing to retain the fastening element by interference with a lateral surface of the fastening element, the depressible latch including a surface that is proximate an opening in the housing and is externally accessible with the fastening element retained in the housing, the depressible latch configured such that the fastening element is inhibited from being removed from the housing absent an application of a force applied to the surface proximate the opening to depress the depressible latch." Similarly, claim 13 recites "a depressible latch connected to the base external to the housing," claim 18 recites "a latch connected to the base external to the housing," and claim 62 recites "the depressible latch is connected to the base external to the housing."

Applicant respectfully asserts that neither Anscher nor any of the other cited references describe a latch connected to the base external to the housing in combination with the remaining features of any of claims 1, 13, 18 and 62. Thus, claims 1, 13, 18 and 62 are not anticipated by Anscher. Further, each of claims 2, 3, 5, 7, 9-12, 14, 19, 20, 22, 24, 26, 27, 30, 32-34, 55, 63, 64, 66, and 67-73 depend either directly or indirectly from one of independent claims 1, 13, 18 and 62. Accordingly, reconsideration and withdrawal of the rejection of claims 1-3, 5, 7, 9-14, 18-20, 22, 24, 26-27, 30, 32-34, 55, 62-64, 66, and 67-73 under 35 U.S.C. §102(e) as being anticipated by Anscher is respectfully requested.

Rejections Under 35 U.S.C. §103

The Office Action rejects claims 6, 23, 31 and 67 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,695,269 to Anscher in view of U.S. Patent No. 5,507,610 to Benedetti et al. (hereinafter "Benedetti"). Each of independent claims 1, 13, 18 and 62 is

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patentable in view of Anscher as described above. Each of claims 6, 23, 31 and 67 depends from one of the allowable independent claims. Benedetti fails to cure the deficiencies of Anscher, namely Benedetti fails to disclose a fastener comprising a base, and a depressible latch connected to the base external to a housing that retains a fastening element. Accordingly, each of claims 6, 23, 31 and 67 is patentable in view of Anscher in view of Benedetti at least for the reasons described above. Accordingly, reconsideration and withdrawal of the rejection of claims 6, 23, 31 and 67 under 35 U.S.C. §103(a) as being unpatentable over Anscher in view of Benedetti is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, reconsideration is respectfully requested. This application should now be in condition for allowance; a notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

A petition and fee for a one month extension of time is included herewith. If this response is not considered timely filed in view of the petition and fee and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed payment, please charge any deficiency to Deposit Account No. 50/2762, Ref. No. C0852-7013.

Respectfully submitted,
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Attachment A

UNITED STATES SPECIFICATION

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN that I, Joseph Anscher, a United States citizen, residing at 1928 Midlane, Muttontown, NY 11791, have invented certain new and useful improvements in a

MULTI-PURPOSE ATTACHMENT DEVICE

of which the following is a specification.

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a multi-purpose attachment device for use on backpacks. In particular, this invention relates to a sliding device for attachment to backpacks and which can be coupled to several different attachment pieces for holding a variety of implements.

2. The Prior Art

Hikers and bicyclists often have the need to attach various implements to the outside of their backpacks. Articles such as flashlights, keys, hydration tubes, etc. are more conveniently carried in an easily accessible place on the backpack's shoulder straps than inside the backpack. This enables the user to reach the implements without having to remove the backpack. This is especially important with hydration tubes, which may must be accessible while a cyclist is riding his other bicycle.

There are several devices that clip to the shoulder straps of backpacks for holding hydration tubes or other implements, depending on the shape and configuration of the device. However, the user may have the need for different devices on different days, depending on the activity planned. Attaching several different devices to the shoulder strap would be inconvenient and unwieldy. Therefore, it would be desirable to have an attachment device for use on a backpack shoulder strap that can accommodate a variety of different implements.

SUMMARY OF THE INVENTION

It is therefore an object of the invention to provide an attachment device for a backpack shoulder strap that can be used to hold a variety of different implements.

It is another object of the invention to provide an attachment device for a backpack shoulder strap that can also be attached to a chest strap.

It is yet another object of the invention to provide an attachment device that is simple and inexpensive to manufacture.

These and other objects are accomplished by an attachment device for a strap, comprising a base, means for attaching the base to a shoulder strap of a backpack and a releasable catch mechanism for securing an implement holder. The invention further comprises at least one implement holder adapted to be releasably secured to the base via the releasable catch mechanism.

The means for attaching the base to a backpack comprises two arms disposed along opposite edges of the base. Each arm has a transverse slit therethrough for threading the base onto a strap. Preferably, the slits are offset from the center of each arm so that removal and attachment of the base to a strap is made easier.

There can also be two additional arms disposed on the other opposite edges of the base, so that all four edges of the base have an arm. All of the arms have a transverse slit therethrough, so that the base is securable on two perpendicular straps. This feature is particularly important if the backpack has both shoulder straps and a chest strap. This way, the attachment device can be secured on both the chest strap and shoulder strap and cannot slide around at all.

The releasable catch mechanism comprises an upwardly extending side wall extending up from the top surface of the base and having an overhanging lip. A flexible arm is integrally formed with the base near the side wall and has a free end extending above the plane of the base. The implement holder comprises a plate, a holder portion attached to the top surface of the plate and an attachment portion extending from the bottom surface of the plate. The attachment portion comprises an outwardly extending flange. The implement holder is coupled to the base by inserting the flange underneath the overhanging lip. The flexible arm exerts upward pressure on the flange and forces it against the lip to hold it in place. The implement holder is released from the base by pressing down on the flexible arm and sliding the flange out from the lip. To keep the implement holder from sliding out from the lip, the side wall and overhanging lip are preferably U-shaped.

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The implement holder can take many forms and can have an infinite number of variations, depending on the function for which it is used. One variation is a hydration tube holder comprising a plate and a flexible S-shaped arm attached at one end to the plate. A hydration tube is held in place by sliding the tube between the plate and the arm. The curve of the S on the arm prevents the tube from escaping.

Another variation is a flashlight holder comprised of a plate and a flexible C-shaped holder element attached at its center to the plate. A flashlight can be snapped into the C-shaped holder element and held there by the friction of the holder element. Another possibility is a D-ring pivotally attached to a plate. Preferably, the base is supplied with several implement holders so that a user can choose which implement holder to use each day.

In an alternative embodiment, the releasable catch mechanism comprises a circular wall with an inwardly overhanging lip. The implement holder comprises a plate having a top surface and a bottom surface, a holding portion attached to the top surface of the plate and two flexible bayonet catches extending from the bottom surface of the plate. The implement holder is attached to the base by inserting the bayonet catches within the circular wall such that they catch on the lip and secure the implement holder to the base.

BRIEF DESCRIPTION OF THE DRAWINGS

Other objects and features of the present invention will become apparent from the following detailed description considered in connection with the accompanying drawings. It is to be understood, however, that the drawings are designed as an illustration only and not as a definition of the limits of the invention.

In the drawings, wherein similar reference characters denote similar elements throughout the several views:

FIG. 1 shows a perspective view of the base of the attachment device according to the invention;

FIG. 2 shows the base as attached to shoulder and chest straps of a backpack;

FIG. 3 shows a perspective view of a hydration tube holder for use with the base;

FIG. 4 shows a cross-sectional view of the hydration tube holder and the base along lines IV - IV of FIG. 1;

FIG. 5 shows a cross-sectional view of the hydration tube holder inserted into the base;

FIG. 6 shows a perspective view of the flashlight holder for use with the base according to the invention;

FIG. 7 shows a side view of the flashlight holder;

FIG. 8 shows a perspective view of a D-ring for use with the base;

FIG. 9 shows a cross-sectional view of the base along lines IX - IX of FIG. 1;

FIG. 10 shows a cross-sectional view of the base of FIG. 9 in a release position;

FIG. 11 shows a perspective view of an alternative embodiment of the base according to the invention;

FIG. 12 shows a perspective view of an alternative embodiment of a hydration tube holder for use with the base shown in FIG. 11; and

FIG. 13 shows a side cross-sectional view of the hydration tube holder of FIG. 12 inserted in the base of FIG. 11.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now in detail to the drawings and, in particular, FIG. 1, there is shown the base 10 according to the invention, to which a variety of implement holders can be attached. Base 10 is an integrally molded one-piece design having four bars 11, 12, 13 and 14 for attaching base 10 to one or more straps. Each of bars 11, 12, 13, 14 has a transverse slit 15 therein to allow straps 16, 17 of a backpack 18 or other item to be easily threaded through base 10, as shown in FIG. 2.

The mechanism for attaching an implement to base 10 comprises a semicircular wall 19 having an overhanging lip 20, and a flexible arm 21, which has a free end extending away from wall 19. The free end of flexible arm 21 extends slightly above the top surface of base 10 to place upward pressure on an implement holder mounted within base 10, as explained below. Arm 21 has a transverse bar 22 extending across the free end of arm 21, and a protrusion 23 at the free end of arm 21. Transverse bar 21 and protrusion 23 serve to keep an implement holder in place once it is inserted underneath lip 20, to lock the implement holder within base 10. They also provide a convenient location for the user to press down on bar 21 to release implement holder as explained below.

One example of a suitable implement holder is a hydration tube clip 25, which is shown in FIG. 3. Tube clip 25 comprises a plate 26 with a resilient S-shaped arm 27 mounted above plate 26. A hydration tube (not shown) is slid in between plate 26 and arm 27. The tube is preferably wider than the lower end of arm 27 so that it cannot escape once it is mounted between plate 26 and arm 27. Clip 25 is secured to base 10 via a hexagonal flange 28, which extends outwardly beneath plate 26.

FIGS. 4 and 5 show the procedure for locking clip 25 into base 10. Flange 28 is slid underneath lip 20 and is pushed upward by arm 21 on base 10, to keep clip 25 locked within base 10.

Other suitable implement holders are a flashlight holder 30 or a D-ring 31, as shown in FIGS. 6-8. Flashlight holder 30 is held in place by a flange 32, similar to flange 28 on clip 25. Flashlight holder 30 has a C-shaped holding element 38 which functionally retains a flashlight therein. D-ring 31 is locked into base 10 in a similar manner via flange 32. D-ring 31 is comprised of a ring portion 36 that is pivotally attached to flange 32 via a hinge 35 mounted in side brackets 34.

The various implement holders can be released from base 10 in a manner shown in FIGS. 9 and 10. The user merely presses downward on flexible arm 21 to create enough room to slide the implement holder out from base 10. This way, the implement holders are easily interchanged to accommodate the user's changing needs.

An alternative embodiment of the invention is shown in FIGS. 11-13. In this embodiment, Base 100 as shown in FIG. 11 has bars 110, 120, 130 and 140, each having a transverse slit 150 for attaching base 100 to a strap in a similar way as that shown in FIG. 2. Base 100 is also equipped with a circular vertical wall 180, which has an inwardly overhanging lip 190, for locking an implement holder within base 100.

A suitable implement holder is shown in FIG. 12 in the form of a hydration tube clip 200. Tube clip 200 has two bayonet catches 220 mounted underneath clip 200. Bayonet catches 220 lock into lip 190 when clip 200 is pushed into base 100, as shown in FIG. 13. Any suitable implement holder having bayonet-type catches could be used with base 100. In addition, any alternative locking mechanism could be used to latch onto base 100 could also be used.

Accordingly, while only a few embodiments of the present invention have been shown and described, it is obvious that many changes and modifications may be made thereunto without departing from the spirit and scope of the invention.

WHAT IS CLAIMED IS:

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1. An attachment device for a strap, comprising:
a base having a front surface, a rear surface and four edges and comprising:
means for attaching the base to a shoulder strap of a backpack;
a releasable catch mechanism for securing an implement holder; and
at least one implement holder adapted to be releasably secured to the base via said releasable catch mechanism.

2. The attachment device according to claim 1, wherein the means for attaching the base to a backpack comprises two arms disposed along opposite edges of said base, each arm having a transverse slit therethrough for threading said base onto ^{the} strap.

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3. The attachment device according to claim 2, wherein ^{said} each slit is offset from the center of the arm.

4. The attachment device according to claim 2, further comprising two additional arms disposed on opposite edges of said base, so that all four edges of said base have an arm, said two additional arms each having a transverse slit therein, such that said base is securable on two perpendicular straps.

5. The attachment device according to claim 4, wherein said slits on said additional arms are offset from the center.

~~6. The attachment device according to claim 1, wherein the releasable catch mechanism comprises side wall extending up from the top surface of said base and having an overhanging lip, and a flexible arm integrally formed with said base and extending above the plane of said base.~~

a 7. The attachment device according to claim 8, wherein the implement holder comprises:

a plate having a top surface and a bottom surface,
a holder portion attached to the top surface of the plate; and

an attachment portion extending from the bottom surface of the plate, said attachment portion comprising an outwardly extending flange,

wherein said implement holder is coupled to the base by inserting the flange underneath the overhanging lip and is held in place by the flexible arm, and wherein said implement holder is released from the base by pressing on the flexible arm and sliding the flange out from the lip.

a 8. The attachment device according to claim 8, wherein the side wall and overhanging lip are semicircular.

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Sub 937 9. ~~The attachment device according to claim 1, wherein the implement holder is a hydration tube holder comprising a plate and a flexible S-shaped arm attached at one end to the plate, wherein a hydration tube is held in place by sliding the tube between the plate and the arm.~~

10. The attachment device according to claim 1, wherein the implement holder is a flashlight holder comprised of a plate and a flexible C-shaped holder element attached at its center to the plate, such that a flashlight can be snapped into said C-shaped holder element.

11. The attachment device according to claim 1, wherein the implement holder is a D-ring.

Sub 947 12. ~~The attachment device according to claim 1, wherein the releasable catch mechanism comprises an enclosed wall with an inwardly overhanging lip, and wherein the implement holder comprises:~~

a plate having a top surface and a bottom surface;

a holding portion attached to the top surface of the plate; and

means for releasably fastening the implement holder to the base.

13. ~~The attachment device according to claim 12, wherein~~
the means for releasably fastening the implement holders to the
base are two outwardly facing bayonet catches extending from the
bottom surface of the plate and wherein the implement holder is
attached to the base by inserting the bayonet catches within said
circular wall such that said bayonet catches catch on said lip and
~~secure the implement holder to the base.~~

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ABSTRACT OF THE DISCLOSURE

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An attachment device for a strap, comprising a base, means for attaching the base to a shoulder strap of a backpack and a releasable catch mechanism for securing an implement holder. The invention further comprises at least one implement holder adapted to be releasably secured to the base via the releasable catch mechanism. The releasable catch mechanism comprises an upwardly extending side wall extending up from the top surface of the base and having an overhanging lip. A flexible arm is integrally formed with the base near the side wall and has a free end extending above the plane of the base. The implement holder comprises a plate, a holder portion attached to the top surface of the plate and an attachment portion extending from the bottom surface of the plate. The attachment portion comprises an outwardly extending flange. The implement holder is coupled to the base by inserting the flange underneath the overhanging lip. The flexible arm exerts upward pressure on the flange and forces it against the lip to hold it in place. The implement holder is released from the base by pressing down on the flexible arm and sliding the flange out from the lip.

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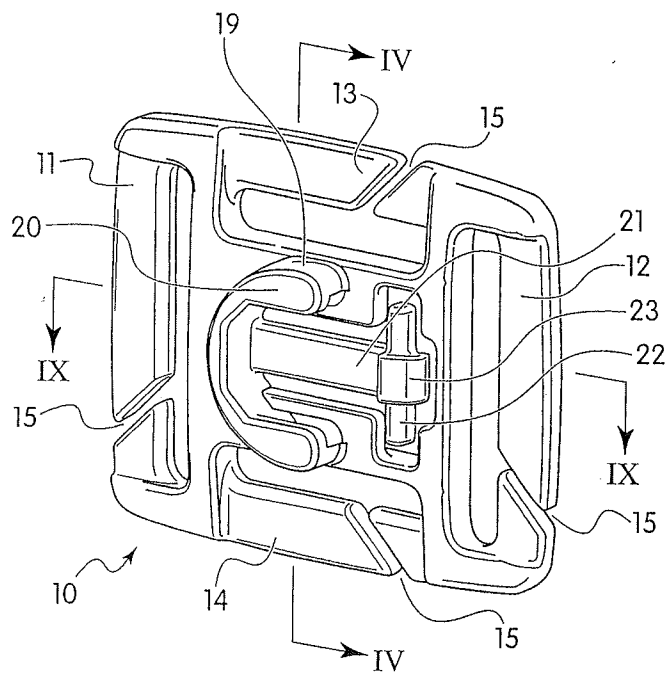


Fig. 1

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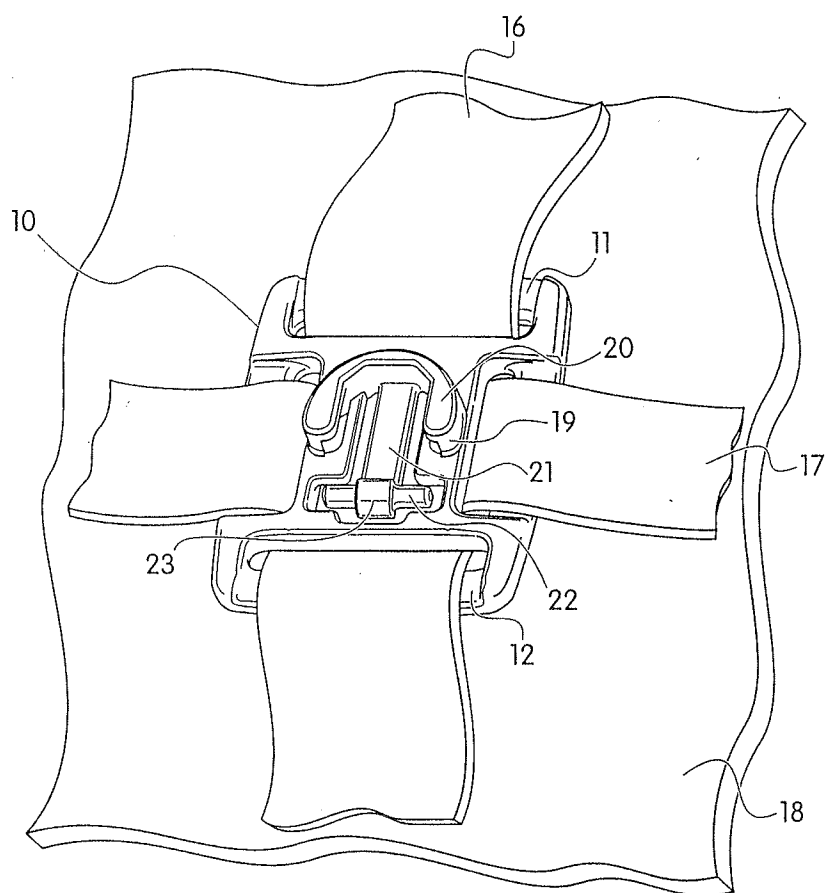


Fig. 2

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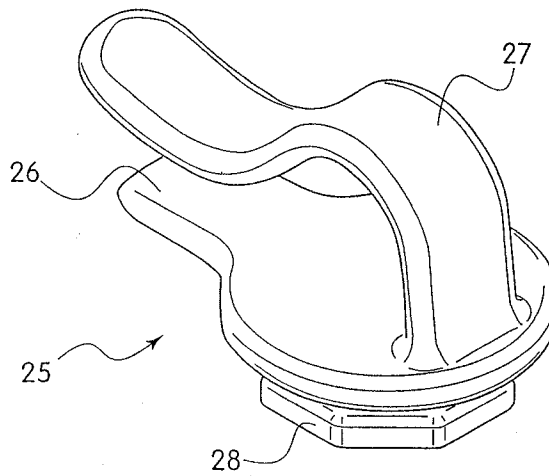


Fig. 3

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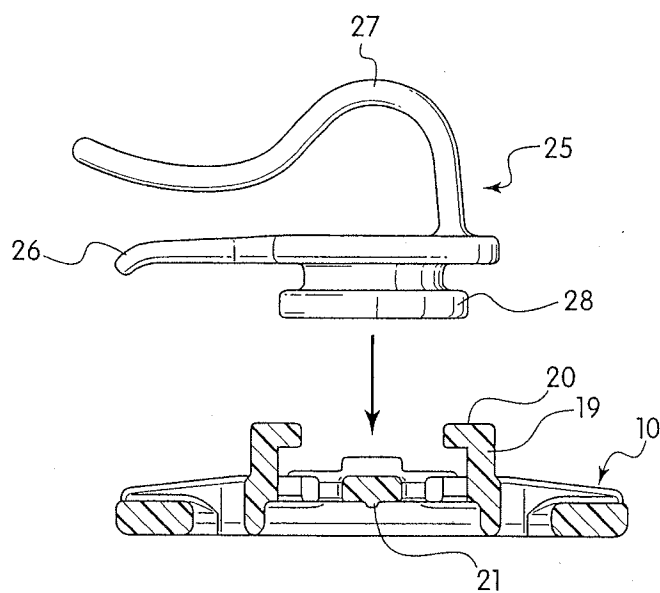


Fig. 4

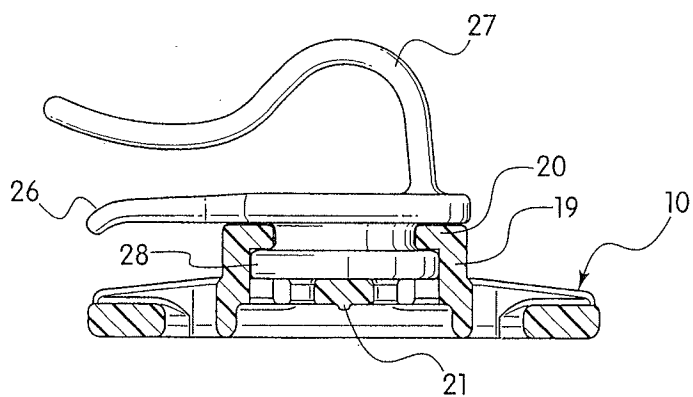


Fig. 5

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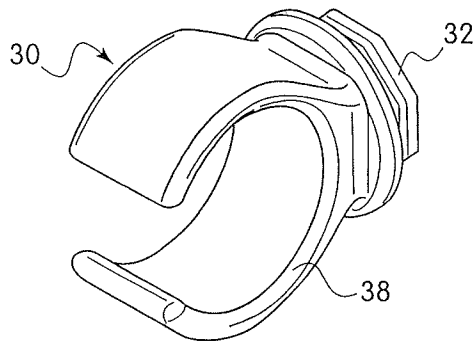


Fig. 6

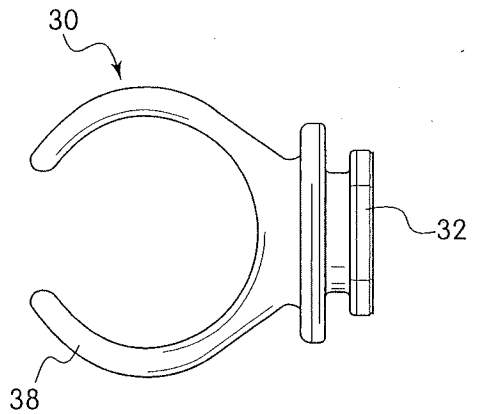


Fig. 7

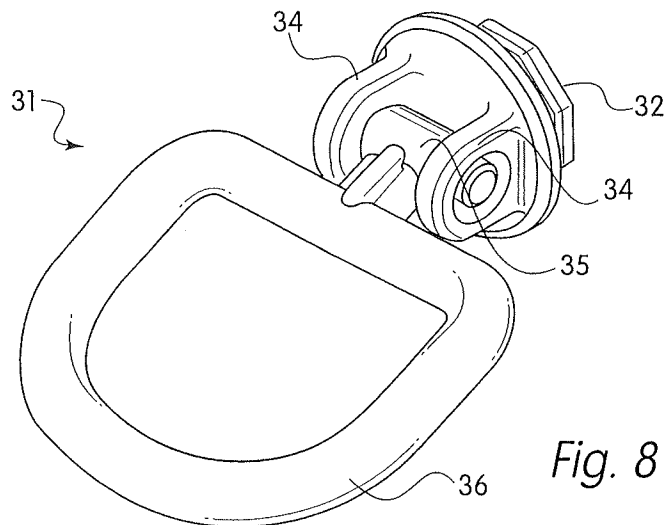


Fig. 8

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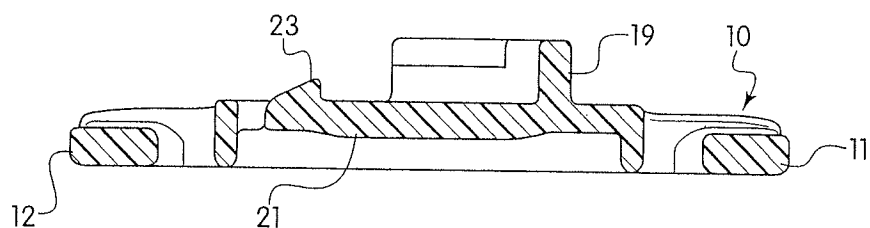


Fig. 9

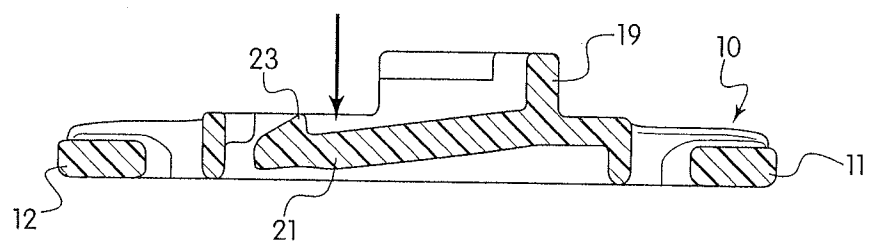


Fig. 10

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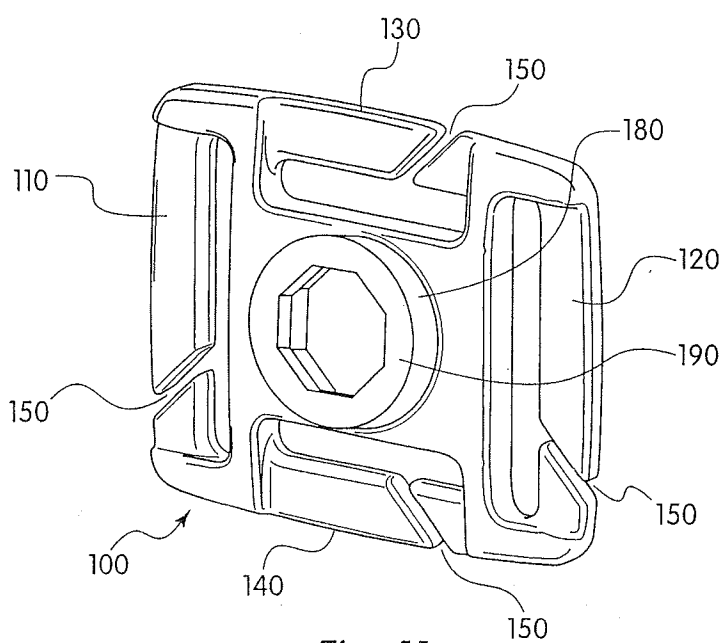


Fig. 11

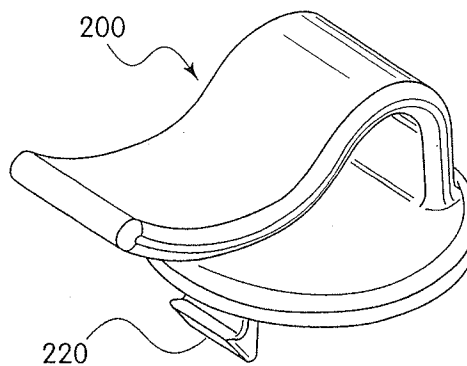


Fig. 12

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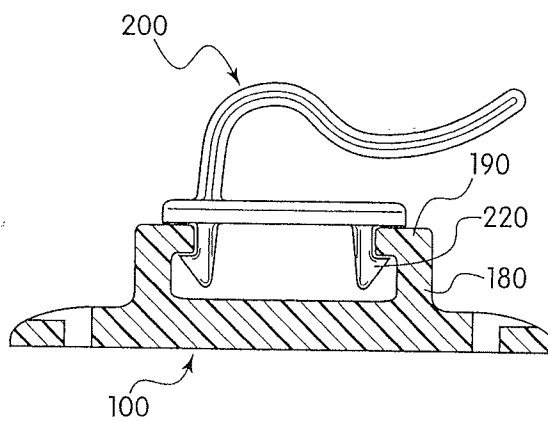


Fig. 13

A BUTTON-LATCH FASTENER

It is useful to employ a button as a means of removable attachment in situations which do not allow conventional use of the button. Ordinarily the connection by button requires that the button be passed through a "button hole", that the "button hole" be located at or near an edge of the material containing the hole in order to provide access to the button both above and below the hole as the button is passed through it.

In order for a button mounted on one surface to be attachable to another point on the surface or to any point on another surface, a device is needed, mountable to the surface at the desired point of attachment, which will provide removable engagement with the button.

Figs. 1-7 illustrate such a device, which is herein referred to as a button-latch fastener 10. In a preferred embodiment, the button-latch fastener incorporates a flange 12 at its periphery which serves as the point of attachment to a surface 14 on which it is mounted.

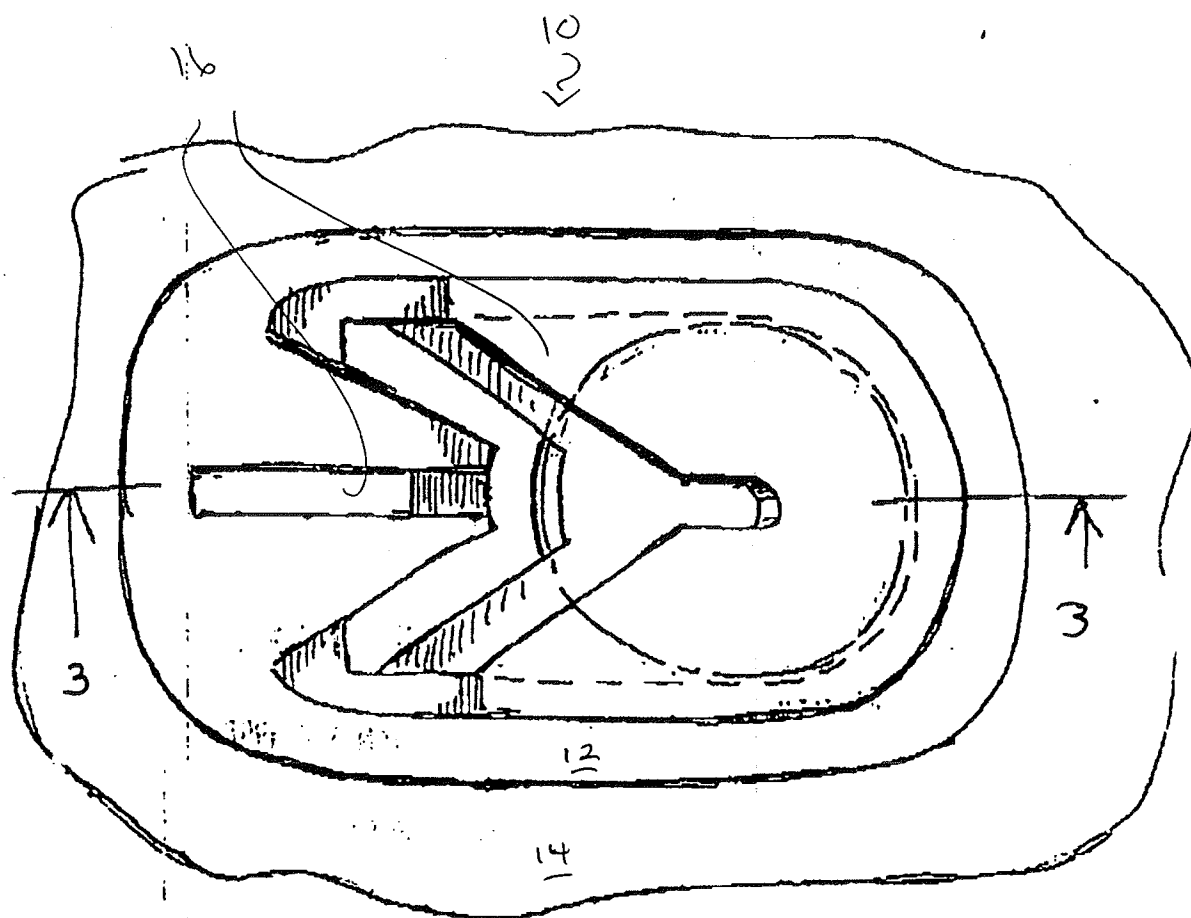
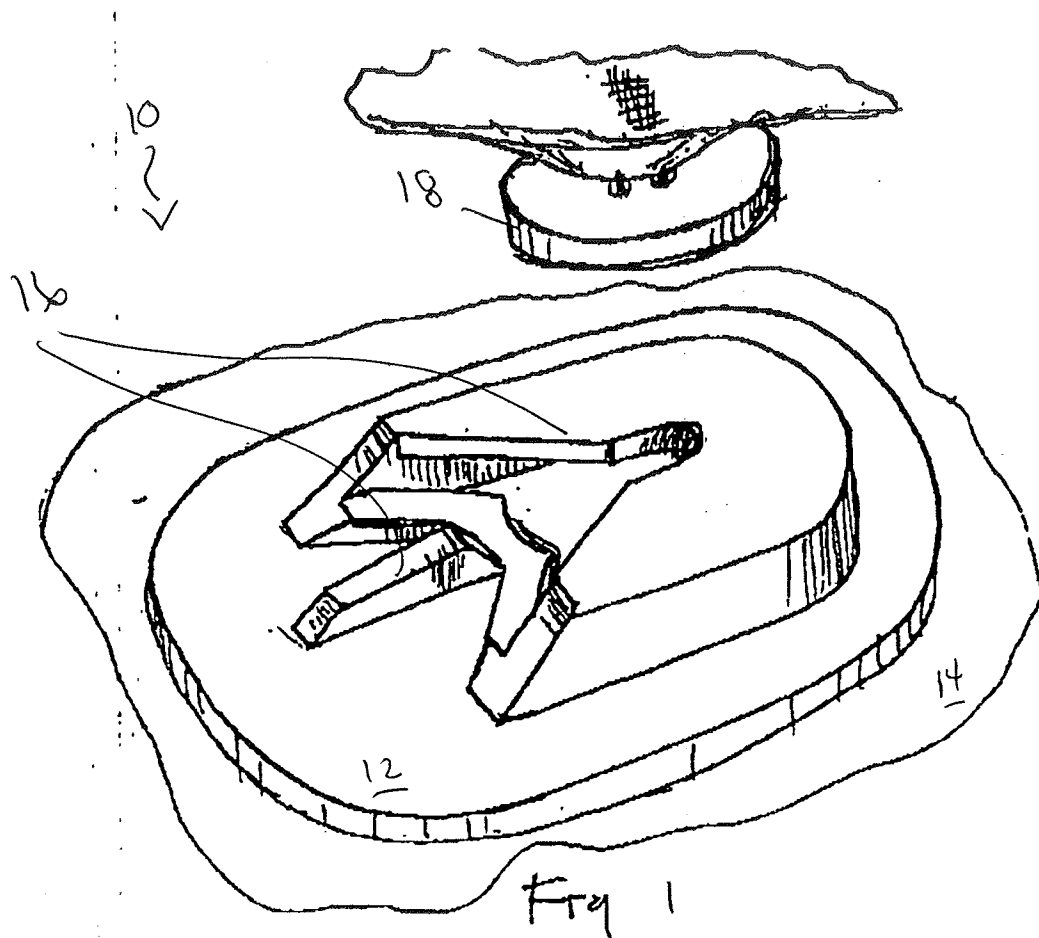
At one or more points more centrally located inside the periphery of flange 12, flexure of a latch 16 allows an appropriately sized button 18 to slide into the latch (See Figs. 5-6), to an attached position where the structure of the latch then resists any sliding of the button out of the latch. The button will then remain contained by the latch until the latch is manually flexed so as to permit sliding of the button out of the latch (See Fig. 7).

The button-latch fastener provides a mechanism for connection/attachment by the button 18, between layers of material in applications where the conventional "button hole" is not available or practical; in particular, in situations where at least one of the layers will accept installation of the button, and at least one of the layers will accept installation of the button-latch 16.

The button-latch fastener 10 is a general purpose fastener which may be used in combination with a button, primarily, though not exclusively, for removably attaching one layer of material (such as a flexible membrane) to another. In doing so, the button-latch 16 serves the same general purpose as a conventional "button hole". However, adaptations unique to the button-latch eliminate the need for a through hole for passing the button through one of the layers (membranes) being attached, as is typically required in order to secure both layers (membranes) in the "buttoned" position. The button-latch thus enables the layer (membrane surface) which would ordinarily contain the "button hole" to be a substantially uninterrupted surface, free of holes.

In the case of a membrane serving as a bladder for fluid containment, the button-latch 16 can, for example, be directly attached to the bladder surface. As the through-hole of conventional button fastening has been eliminated, the bladder membrane remains uninterrupted. Surface continuity, of course, is critical to the bladder's ability to contain fluid. The button-latch provides the necessary surface contiguity (holding one membrane layer to another in a secured position) while maintaining continuity of bladder surface, allowing the bladder membrane to maintain impermeability and fully contain fluid.

The button-latch fastener 16 readily accommodates both engagement with and disengagement from the "buttoned" position of a material or membrane containing the button 18, with a surface containing the latch 16. For example, the latch can be attached to a bladder surface of, for example, an air mattress, and the button can be attached to a fabric to be used, for example, as a mattress cover. Other uses of the button latch fastener readily apparent to one of skill in the art are intended to be within the scope of this disclosure.



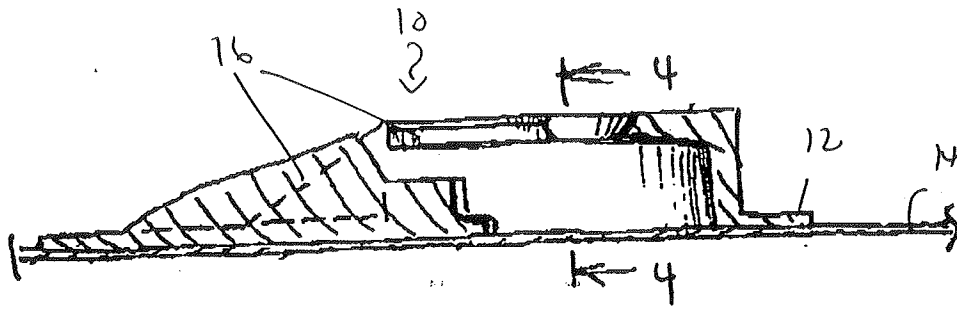


Fig 3

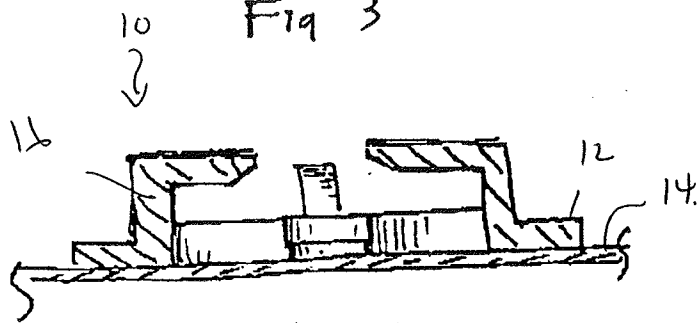


Fig 4

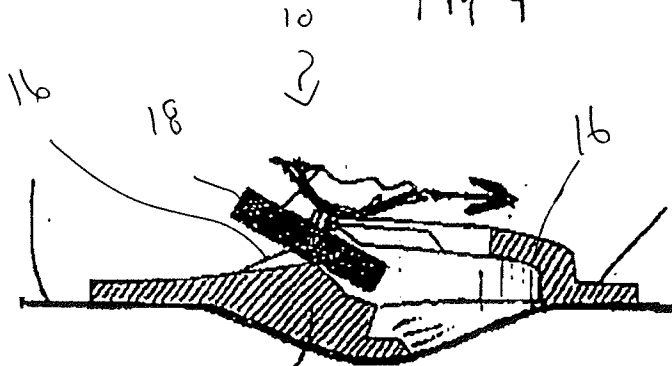


Fig 5

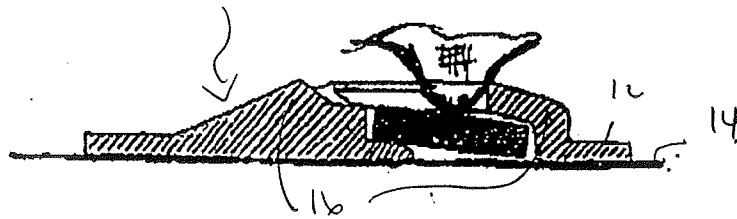


Fig 6

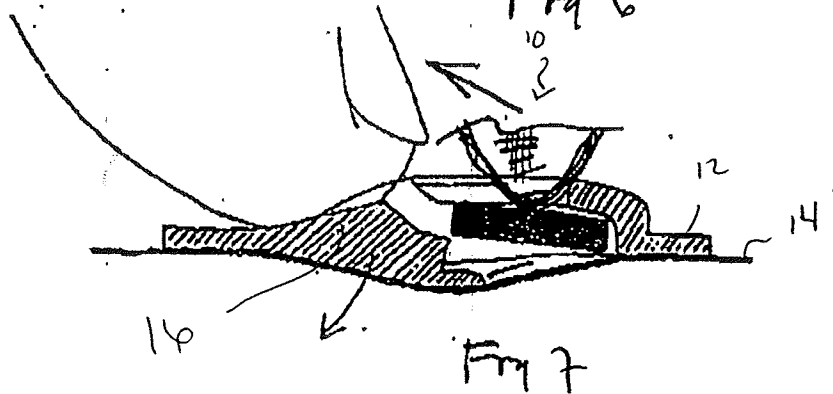


Fig 7